5

Abstract

Scheduling mechanisms for attaining a per-hop behavior for a plurality of classes of packet traffic in a multi-hop network are described. The per-hop behavior allocates to each class a nominal departure rate and a minimum percentage of available bandwidth. The scheduling mechanisms define a first condition that affects packet forwarding in accordance with the nominal departure rates allocated to the classes and a second condition that affects packet forwarding in accordance with the minimum percentages of the available bandwidth allocated to the classes. Packet forwarding rates for each of the classes are compared with the first and second conditions to select one of the classes for forwarding packets of that class over the network.